

IN THE SPECIFICATION

Please replace the paragraph beginning at page 16, line 5 through 16 with the following rewritten paragraph:

-- Further, a GPS base station 25 is installed in a place of which latitude and longitude have exactly been measured. A signal from a GPS satellite 26A is received by the GPS receivers 20, 21 of the on-board system 10, and it is also received by a receiver 26 installed in the GPS base station 25. The GPS base station 25 computes correction data and transmits the computed correction data from a wireless unit 27 to the wireless unit 24-22 of the on-board system 10. The computer 23 of the on-board system 10 computes the bucket fore end position (three-dimensional position) based on the GPS satellite data, the correction data, and attitude data obtained from the sensors 15-18 and 24 and the gyro 19.--

Please replace the paragraph beginning at page 21, line 19 through page 23, line 10, with the following rewritten paragraph:

-- The state of the working region before the start of work (i.e., the original landform) can be obtained, for example, as the result of remote sensing using the satellite or the result of measurement using a surveying device. The thus-obtained

data is subjected to the above-described mesh processing and then inputted to the computer 23 by using a recording medium, such as an IC card, to be stored in the before-work object information table 45 and the display table 47. The target landform of the working region can be obtained by storing CAD data of a working plan drawing and the current position of the bucket fore end in the computer 2023, and by inputting data resulting from, e.g., direct teaching with the current position of the bucket fore end set as a target plane. The thus-obtained data is similarly subjected to the above-described mesh processing and then inputted to the computer 23 by using a recording medium, such as an IC card, to be stored in the target value information table 46 and the display table 47. The current state of the working region includes, as mentioned above, the state (landform) before daily work, the state (landform) during daily work, the state (landform) after daily work, and the state (landform) after the completion of total work. Of those states, the state during daily work can be obtained by storing, as the current height, the position of the bucket fore end under excavation and updating the previous current state. That data is periodically stored in the work object information table 44 and the display table 47 upon timer interrupts. Also, of the state before daily work, the state before work on the first day for the total working term can be obtained by copying the state before the start of work (i.e., the original landform) stored in the before-work object information table 45. The state before work on the second or subsequent day can be obtained by copying the state after work on the previous day, and the state after daily work can be obtained by copying the last state during work on that day. Those data are also stored in the work object information table 44 and the display table 47.

Further, the state after the completion of total work can be obtained by copying the state after work at the completion of the total work, and that data is similarly stored in the work object information table 44 and the display table 47. Alternatively, the state after the completion of total work may be obtained as the result of remote sensing using the satellite, or the result of storing the position of the bucket bottom as the current height in the condition where the bucket bottom is brought into contact with the completed ground, or the result of measurement using a surveying device.--

Please replace the paragraph beginning at page 38, line 23 through line 27, with the following paragraph:

-- As mentioned above, map data may be superimposed, as required, on the buried mine data stored in the tables ~~44-144~~ through ~~47-147~~. This enables the operator to know the presence or absence of rivers, roads, etc., thus resulting in an increase of the working efficiency.--

Please replace the paragraph beginning at page 46, line 12 through line 14, with the following rewritten paragraph:

-- The data contents stored in the tables ~~141-241~~ through ~~148-248~~ are essentially the same as those in the first embodiment shown in Fig. 3 except for the following points.--

Please replace the paragraph beginning at page 47, line 22 through page 48 line 9 with the following rewritten paragraph:

-- The state of the working region stored in the display table 247 includes the state in the work planning stage, the state during work, the state after work, and the state after the completion of total work. The state in the work planning stage is given by copying the ~~state~~target value before the start of work, which is stored in the ~~before-work-object~~target value information table ~~245~~246. The state during work is given by copying the state during work, which is stored in the work object information table ~~124~~244. The state after work is given by copying the state after work, which is stored in the work object information table ~~124~~244. The state after the completion of total work is given by copying the state after the completion of total work, which is stored in the work object information table 244. Those states are stored in corresponding areas 247a, 247b, 247c and 247d within the display table 247.

Please replace the paragraph beginning at page 48, line 27 through page 49 line 27, with the following rewritten paragraph:

-- The current state of the working region includes, as mentioned above, the state before daily work, the state during daily work, the state after daily work, and the state after the completion of total work. Of those states, the state during daily work can be obtained by, whenever the solidifier is loaded, correcting the previous current state. That data is periodically stored and updated in the work object information

table 244 upon timer interrupts. Also, of the state before daily work, the state before work on the first day for the total working term can be obtained by copying the state target value before the start of work stored in the ~~before-work-object~~target value information table 245246. The state before work on the second or subsequent day can be obtained by copying the state after work on the previous day, and the state after daily work can be obtained by copying the last state during work on that day. Those data are also stored in the work object information table 244. Further, the state after the completion of total work can be obtained by copying the state after work at the completion of the total work, and that data is similarly stored in the work object information table 244. Of the target state of the working region, the position where the solidifier is to be loaded can be obtained from data representing a place that requires the loading of the solidifier, and the amount of the loaded solidifier can be obtained by converting the hardness of the ground requiring the loading of the solidifier into the amount of the loaded solidifier. Those data are also subjected to the mesh processing and stored in the target value information table 246.--

Please replace the paragraph beginning at page 52, line 13 through line 26 with the following rewritten paragraph:

-- If "total-work completion screen" is selected, the total-work completion screen D3 shown in Fig. 15 is displayed on the monitor ~~423a~~223a and detailed data after the completion of total work is also displayed (steps S108B, S122B and S124B). The detailed data displayed here includes the total area of the completely solidifier

loaded region, the number of positions where the solidifier has actually been loaded, the amount of the loaded solidifier, etc. The number of positions where the solidifier has actually been loaded and the amount of the loaded solidifier can be calculated by summing up, respectively, the daily number of positions where the solidifier has been loaded and the daily amount of the loaded solidifier from the first to last day. Those data are also stored in the work information table 243.--

Please replace the paragraph beginning at page 53, line 11 through page 54, line 9 with the following rewritten paragraph:

-- The ground improving support database 240 includes the display table 247 and the display specifics table 248, which serve as storage means dedicated for display. The state of the working region per mesh is stored in the display table 247, and the discriminative display method (display color) is stored in the display specifics table 248 corresponding to the state per mesh. Reference is made to the display specifics table 248 on the basis of the state (the position and amount of the solidifier loaded) per mesh, which is stored in the display table 247, to read the corresponding display color from the display specifics table 248, thereby displaying the state of the working region in a color-coded manner. Even for different types of working machines, therefore, the state of the working region can similarly be displayed in a discriminative manner just by modifying parameters (e.g., from the height in the first embodiment to the position and amount of the solidifier loaded), which are used to represent the state of the working region stored in the display table 247 and the

display specifics table 248, depending on the type of working machine and by modifying, in match with such a modification, parameters related to the state of the working region, which are used in the processing software represented as the flowcharts of Fig. 4216. As a result, it is possible to easily employ the work support and management system in different types of working machines in common, and to inexpensively prepare the work support and management system with ease.